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*Leucadendrons*, depending on cultivar, can be marketed in different developmental stages viz. (a) as greens when the degree of hardening off of leaves and involucreal leaves will be a function of the time after cessation of elongation growth of shoots, (b) during the phase of anthesis or (c) as a cone post anthesis. It will be useful to determine the susceptibility for CI for the different developmental stages of the commercial cultivars. This will apply especially to cultivars marketed as greens. Furthermore, since hardening may also be a function of climatic and cultural factors their relationship to CI sensitivity should be quantified in order to develop practices that reduce CI sensitivity.

The sugars were not as effective in controlling CI as for *Leucospermums*. There was control of CI by the sugars in the leaves but no apparent control in the inner bracts except for 'Safari Sunset' stored for 28 days. The relatively poor control of CI with sugar pulsing may be concentration related as was shown to be the case in *Leucospermums*. As in the case of *Leucospermums* the effect of sugars to suppress CI has no obvious explanation and we speculate that the positive effects of the sugars are due to their presence in the apoplast and not the symplast. Pulsing with a 1% glucose solution (10 000 mg/l) may have increased the apoplastic concentration of sugars to a level that in some or other way protected the membranes against low temperatures and thus decreased the incidence of CI. Since pulsing with 1% sugar solution exacerbated CI of involucreal leaves in a number of cases lower concentrations should be tested before commercial recommendations can be made.